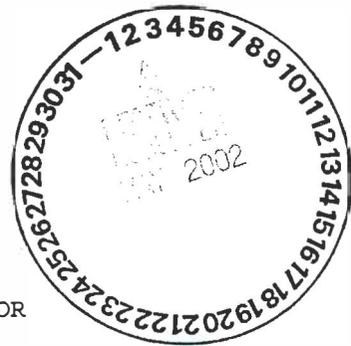


0057823

H1740



Lionville Laboratory, Inc.  
PEST/PCB ANALYTICAL DATA PACKAGE FOR  
TNUHANFORD B02-003 H1740

DATE RECEIVED: 04/09/02

LVL LOT # :0204L355

CLIENT ID	LVL #	MTX	PREP #	COLLECTION	EXTR/PREP	ANALYSIS
B14CW8	001	SO	02LE0395	04/04/02	04/10/02	04/21/02
B14CW8	001 01	SO		04/04/02	04/10/02	04/21/02
B14CW8	001 MS	SO	02LE0395	04/04/02	04/10/02	04/21/02
B14CW8	001 MS 01	SO		04/04/02	04/10/02	04/21/02
B14CW8	001 MSD	SO	02LE0395	04/04/02	04/10/02	04/22/02
B14CW8	001 MSD 01	SO		04/04/02	04/10/02	04/22/02
B14CW9	002	SO	02LE0395	04/04/02	04/10/02	04/21/02
B14CW9	002 01	SO		04/04/02	04/10/02	04/21/02
B14CX0	003	SO	02LE0395	04/04/02	04/10/02	04/21/02
B14CX0	003 01	SO		04/04/02	04/10/02	04/21/02
B14CX1	004	SO	02LE0395	04/04/02	04/10/02	04/21/02
B14CX1	004 01	SO		04/04/02	04/10/02	04/21/02
B14CX2	005	SO	02LE0395	04/04/02	04/10/02	04/21/02
B14CX2	005 01	SO		04/04/02	04/10/02	04/21/02
B14CX3	006	SO	02LE0395	04/04/02	04/10/02	04/21/02
B14CX3	006 01	SO		04/04/02	04/10/02	04/21/02
B14CX4	007	SO	02LE0395	04/04/02	04/10/02	04/21/02
B14CX5	008	SO	02LE0395	04/04/02	04/10/02	04/21/02
B14CW1	009	SO	02LE0395	04/04/02	04/10/02	04/21/02

LAB QC:

PBLKLR	MB1	S	02LE0395	N/A	04/10/02	04/21/02
PBLKLR	MB1 BS	S	02LE0395	N/A	04/10/02	04/21/02

*File 4/25/02*

RECEIVED  
AUG 12 2002

EDMC

*n,*



## Analytical Report

Client: TNU HANFORD B02-003

LVL#: 0204L355

SDG/SAF#: H1740/B02-003

W.O.#: 11343-606-001-9999-00

Date Received: 04-09-2002

### PESTICIDES

Nine (9) solid samples were collected on 04-04-2002.

The samples and their associated QC samples were extracted on 04-10-2002 and analyzed according to Lionville Laboratory OPs based SW846, 3rd Edition procedures on 04-21,22-2002. The extraction procedure was based on method 3540 and the extracts were analyzed based on method 8081.

The following is a summary of the QC results accompanying the sample results and a description of any problems encountered during their analyses:

1. All results presented in this report are derived from samples that met LVL's sample acceptance policy.
2. The required holding time for extraction and analysis has been met.
3. Samples and their associated QC samples received a sulfur cleanup.
4. The method blank was below the reporting limits for all target compounds.
5. One (1) of twelve (12) obtainable surrogate recoveries was outside acceptance criteria. However, the surrogate recovery criteria were met (i.e., no more than one outlier per sample).
6. All blank spike recoveries were within acceptance criteria.
7. Matrix spike recoveries were unobtainable due to the dilution required for analysis.
8. Most samples required dilution due to high levels of target analytes. Reporting limits have been adjusted to reflect the necessary dilution.
9. All initial calibrations associated with this data set were within acceptance criteria.
10. The continuing calibration standards analyzed prior to sample extracts were within acceptance criteria with the exception of target compound 4,4-DDE analyzed on 04-22-2002 at 0957 on the secondary column. The data reflected an increase in instrument response, so the ability to identify the compound was not impaired. A copy of the Sample Discrepancy Report (SDR) has been enclosed.
11. I certify that this sample data package is in compliance with SOW requirements, both technically and for completeness, other than the conditions detailed above. Release of the data contained in this hard-copy data package has been authorized by the Laboratory Manager or a designee, as verified by the following signature.

  
\_\_\_\_\_  
J. Michael Taylor  
President  
Lionville Laboratory Incorporated

04-26-02  
Date

sonm\v:\group\data\hpest\urs lipan\04L-355.pes

The results presented in this report relate only to the analytical testing and conditions of the samples at receipt and during storage. All pages of this report are integral parts of the analytical data. Therefore, this report should only be reproduced in its entirety of 1 1 pages.





## GLOSSARY OF PESTICIDE/PCB DATA

### DATA QUALIFIERS

- U = Indicates that the compound was analyzed for but not detected. The minimum detection limit for the sample (not the method detection limit) is reported with the U (e.g., 10U).
- J = Indicates an estimated value. This flag is used in cases where a target analyte is detected at a level less than the lower quantification level. If the limit of quantification is 10 ug/L and a concentration of 3 ug/L is calculated, it is reported as 3J.
- B = This flag is used when the analyte is found in the associated blank as well as in the sample. It indicates possible/probable blank contamination.
- E = Indicates that the compound was detected beyond the calibration range and was subsequently analyzed at a dilution.
- I = Interference.

### ABBREVIATIONS

- BS = Indicates blank spike in which reagent grade water is spiked with the CLP matrix spiking solutions and carried through all the steps in the method. Spike recoveries are reported.
- BSD = Indicates blank spike duplicate.
- MS = Indicates matrix spike.
- MSD = Indicates matrix spike duplicate.
- DL = Indicates that recoveries were not obtained because the extract had to be diluted for analysis.
- NA = Not Applicable.
- DF = Dilution Factor.
- NR = Not Required.
- SP = Indicates Spiked Compound.



## GLOSSARY OF PESTICIDE/PCB DATA

- = This flag is used for an PESTICIDE/PCB target analyte when there is greater than 25% difference for detected concentrations between the two GC columns (see Form X). The lower of the two values is reported on Form 1 and flagged with a "P".
- ) = This flag identifies all compounds identified in an analysis at a secondary dilution factor.
- C = This flag applies to a compound that has been confirmed by GC/MS.

Lionville Laboratory, Inc.  
Pesticides/PCB by GC, Special List

Report Date: 04/24/02 15:00

RFW Batch Number: 0204L355

Client: **TNUHANFORD B02-003 H1740** Work Order: 11343606001 Page: 1

Cust ID:		B14CW8	B14CW8	B14CW8	B14CW8	B14CW8	B14CW8
Sample Information	RFW#:	001	001 DL	001 MS	001 MS	001 MSD	001 MSD
	Matrix:	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID
	D.F.:	10.0	100	10.0	100	10.0	100
	Units:	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Surrogate:	Decachlorobiphenyl	D %	D %	D %	D %	D %	D %
	Tetrachloro-m-xylene	D %	D %	D %	D %	D %	D %
		fl	fl	fl	fl	fl	fl
4,4'-DDE		E	1000	E	1000	E	530
4,4'-DDD		33 U	NA	32 U	NA	33 U	NA
4,4'-DDT		85	NA	D %	D %	D %	D %

Cust ID:		B14CW9	B14CW9	B14CX0	B14CX0	B14CX1	B14CX1
Sample Information	RFW#:	002	002 DL	003	003 DL	004	004 DL
	Matrix:	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID
	D.F.:	1.00	10.0	10.0	100	1.00	10.0
	Units:	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Surrogate:	Decachlorobiphenyl	110 %	D %	D %	D %	105 %	D %
	Tetrachloro-m-xylene	80 %	D %	D %	D %	55 %	D %
		fl	fl	fl	fl	fl	fl
4,4'-DDE		E	270	E	480	E	270
4,4'-DDD		3.3 U	NA	33 U	NA	5.3 .I	NA
4,4'-DDT		14	NA	58	NA	15	NA

U= Analyzed, not detected. J= Present below detection limit. B= Present in blank. NR= Not reported. NS= Not spiked.  
% = Percent recovery. D= Diluted out. I= Interference. NA= Not Applicable. \*= Outside of EPA CLP QC

*Handwritten signature*





Bechtel Hanford Inc.		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST				B02-003-13		Page 1 of 1		
Collector K Gano   <i>A. Johnson</i>		Company Contact K Gano		Telephone No. 372-9216		Project Coordinator TRENT, SJ		Price Code 9N Data Turnaround 45 Days		
Project Designation Horseshoe Landfill Residual Pesticide - Biota		Sampling Location ALE		SAF No. B02-003		Air Quality <input type="checkbox"/>				
Ice Chest No. <i>ERC 02-004</i>		Field Logbook No.		COA MEA1221P40		Method of Shipment Fed EX				
Shipped To TMA/RECRA		Offsite Property No. <i>A020105</i>		Bill of Lading/Air Bill No. <i>790373995440</i>						
POSSIBLE SAMPLE HAZARDS/REMARKS				Preservation	Cool 4C					
Special Handling and/or Storage				Type of Container	P					
				No. of Container(s)	1					
				Volume	1000mL					
SAMPLE ANALYSIS				Pesticides - 8081 (4,4'- DDD, 4,4'- DDE, 4,4'- DDT)						
Sample No.	Matrix *	Sample Date	Sample Time							
B14CW8	OTHER SOLID	4.4.02	1029	X			Grid #1			
B14CW9	OTHER SOLID	4.4.02	1115	X			Grid #4			
B14CX0	OTHER SOLID	4.4.02	1145	X			Grid #10			
B14CX1	OTHER SOLID	4.4.02	1210	X			Grid #17			
CHAIN OF POSSESSION				Sign/Print Names		SPECIAL INSTRUCTIONS				
Relinquished By/Removed From		Date/Time		Received By/Stored In		Date/Time		Matrix *		
<i>April Johnson</i>		4.4.02 1545		<i>R. Fahlberg</i>		4.4.02 1545		S=Soil SE=Sediment SO=Solid SL=Sludge W=Water O=Oil A=Air DS=Drum Solids DL=Drum Liquids T=Time W=Wipe L=Liquid V=Vegetation X=Other		
Relinquished By/Removed From		Date/Time		Received By/Stored In		Date/Time				
REF 2C		4802 1300		S JGALE		4802 1300				
Relinquished By/Removed From		Date/Time		Received By/Stored In		Date/Time				
S JGALE		4802 1300		FED EX						
Relinquished By/Removed From		Date/Time		Received By/Stored In		Date/Time				
FED EX		04/09/02 @ 0945		Trent		04/09/02 @ 0945				
Relinquished By/Removed From		Date/Time		Received By/Stored In		Date/Time				
Relinquished By/Removed From		Date/Time		Received By/Stored In		Date/Time				
LABORATORY SECTION	Received By	Title	Date/Time							
FINAL SAMPLE DISPOSITION	Disposal Method	Disposed By	Date/Time							

## SPECIAL INSTRUCTIONS

Samples did not originate in radiological controlled area. No total activity associated with sample/samples.

Personnel not available to relinquish samples from the 3728 Ref # 2C on 4/8/02

*Sample 4-8-02*  
R. FAHLBERG UNAVAILABLE TO RELINQUISH SAMPLES.

<b>Bechtel Hanford Inc.</b>		<b>CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST</b>			B02-003-14	Page 1 of 1
Collector K Gano   <i>A. Johnson</i>	Company Contact K Gano	Telephone No. 372-9216	Project Coordinator TRENT, SJ		Price Code 9N	Data Turnaround 45 Days
Project Designation Horseshoe Landfill Residual Pesticide - Biota	Sampling Location ALE	SAF No. B02-003	Air Quality <input type="checkbox"/>			
Ice Chest No. <i>ERC-02-004</i>	Field Logbook No.	COA MEA1221P40	Method of Shipment Fed EX			
Shipped To TMA/RECRA	Offsite Property No. <i>A020105</i>	Bill of Lading/Air Bill No. <i>7903 7399 5440</i>				

POSSIBLE SAMPLE HAZARDS/REMARKS				Preservation	Cool 4C													
Special Handling and/or Storage				Type of Container	P													
				No. of Container(s)	1													
				Volume	1000mL													
				SAMPLE ANALYSIS				Pesticides - 8081 (4,4- DDD, 4,4- DDE, 4,4- DDT)										
Sample No.	Matrix *	Sample Date	Sample Time															
B14CX2	OTHER SOLID	<i>4.4.02</i>	<i>1315</i>	X	<i>Grid # 8</i>													
B14CX3	OTHER SOLID	<i>4.4.02</i>	<i>1335</i>	X	<i>Grid # 7</i>													
B14CX4	OTHER SOLID	<i>4.4.02</i>	<i>1405</i>	X	<i>Grid # 37</i>													
B14CX5	OTHER SOLID	<i>4.4.02</i>	<i>1445</i>	X	<i>Grid # 22</i>													
<i>B14CW1</i>	<i>other solid</i>	<i>4.4.02</i>	<i>1515</i>	X	<i>control</i>													

CHAIN OF POSSESSION		Sign/Print Names		SPECIAL INSTRUCTIONS		Matrix *
Relinquished By/Removed From <i>Douglas Johnson</i>	Date/Time <i>4.4.02 1545</i>	Received By/Stored In <i>R. Fellberg</i>	Date/Time <i>4.4.02</i>	<p>Samples did not originate in radiological controlled area. No total activity associated with sample/samples.</p> <p>Personnel not available to relinquish samples from the 3728 Ref # <i>ZC</i> on <i>4/18/02</i></p> <p><i>R. FANLBERG UNAVAILABLE TO RELINQUISH SAMPLES</i></p>		<p>S=Soil SE=Sediment SO=Solid SI=Sludge W=Water O=Oil A=Air DS=Drum Solids DL=Drum Liquid T=Tissue WI=Wipe L=Liquid V=Vegetation X=Other</p>
Relinquished By/Removed From <i>REF ZC</i>	Date/Time <i>4.8.02 1300</i>	Received By/Stored In <i>SJGALE</i>	Date/Time <i>4.8.02 1300</i>			
Relinquished By/Removed From <i>SJGALE</i>	Date/Time <i>4.8.02 1300</i>	Received By/Stored In <i>FED EX</i>	Date/Time			
Relinquished By/Removed From <i>Fed Ex</i>	Date/Time <i>04/09/02 @ 0945</i>	Received By/Stored In <i>J. Perry</i>	Date/Time <i>04/09/02 @ 0945</i>			
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time			
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time			

LABORATORY SECTION	Received By	Title	Date/Time
FINAL SAMPLE DISPOSITION	Disposal Method	Disposed By	Date/Time

# LIONVILLE LABORATORY INCORPORATED SAMPLE RECEIPT CHECKLIST

CLIENT: *TNU Hanford*

DATE: *04/09/02*

Purchase Order/Project:

SAF# / SOW# / Release #: *802-003*

Laboratory SDG #: *0204L355*

**NOTE: ALL ENTRIES MARKED "NO" MUST BE EXPLAINED IN THE COMMENT SECTION**

1. Custody seals on coolers or shipping container intact, signed and dated?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	<input type="checkbox"/> see Comment #
2. Outside of coolers or shipping containers are free from damage?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	<input type="checkbox"/> see Comment #
3. Airbill # recorded? <i>790373945440</i>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	<input type="checkbox"/> see Comment #
4. All expected paperwork received (coc and other client specific: historical data, alpha/beta or other screening data as applicable)? (paperwork sealed in plastic bag and taped to inside lid)	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/> see Comment # <i>(i)</i>
5. Sample containers are intact?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	<input type="checkbox"/> see Comment #
6. Custody seals on sample containers intact, signed and dated?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	<input type="checkbox"/> see Comment #
7. All samples on coc received?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	<input type="checkbox"/> see Comment #
8. All sample label information matches coc?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	<input type="checkbox"/> see Comment #
9. Laboratory QC samples designated on coc? (QC stickers placed on bottles?)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	<input type="checkbox"/> see Comment #
10. Shipment meets LvLI Sample Acceptance Policy? (identify all bottles not within policy. See reverse side for policy)	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	<input type="checkbox"/> see Comment #
11. Where applicable, bar code labels are affixed to coc?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	<input type="checkbox"/> see Comment #
12. coc signed and dated?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	<input type="checkbox"/> see Comment #
13. coc faxed or emailed to client?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	<input type="checkbox"/> see Comment #
14. Project Manager/Client contacted concerning discrepancies? (name/date)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	<input type="checkbox"/> see Comment #

Cooler # / temp and Comments: *(1) Not taped to inside of lid*

*ERC-02-004  
30C*

Laboratory Sample Custodian: *J Perry 04/09/02 @ 0945*  
 Laboratory Project Manager: